

REMARKSRejection of Claims and Summary of Response

Claims 2-9, 41, 43-54 and 57-77 are pending. Claims 2-9, 41, 43-54 and 57-77 were rejected under 35 U.S.C. § 102. Reconsideration and allowance of Claims 2-9, 41, 43-54 and 57-77 is requested.

Rejection of Claims under 35 U.S.C. § 102

In the Office Action, Claims 2-9, 41, 43-54 and 57-77 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,557,754 issued to Gray et al.

Regarding Claim 43, the Office Action stated:

Gray teaches an integrated circuit card interface device (card interface circuit to detect a mode of a card, col. 1 line 46 - col. 2 line 3) comprising:  
an application memory (module 42, col. 4, lines 13-32)  
an application engine for managing one or more applications in said application memory (firmware which the processor 40 executes for operation of the card reader 20 and for monitoring data and/or commands from the computer 12, col. 4 lines 33-65)  
an input/output module (buffer for data inputs and outputs, col. 4 lines 33-65)  
a host interface (mode to enable the card 80 to communicate directly with a host computer, such as computer 12 (FIG. 1A), col. 6 line 52 - col. 7 lines 13); and  
one more integrated circuit card interfaces (circuits 105a and 105b, USB UART 224 or 226, processor 32 and firmware installed in memory 34, col. 8 line 49 - col. 9 line 8)  
wherein the interface device is adapted to enable operation in accordance with multiple modes of operation (reader interface circuit ... operable in two communication modes, col. 1 line 46 - col. 2 line 3), the multiple modes of operation comprising a standalone mode of operation in which the interface device is not operably connected to

a host device via the host interface (passive mode to enable the card 80 to communicate directly with the processor 12b, col. 8 lines 4-31).

Gray et al. do not teach or suggest "[a]n integrated circuit card interface device ... adapted to enable operation in accordance with multiple modes of operation, the multiple modes of operation comprising a standalone mode of operation in which the interface device is not operably connected to a host device via the host interface," as recited in Claim 43. Gray et al. teach, as described, for example, in the Abstract and at column 1, lines 46-58 of the Gray et al. patent, a card and/or card reader that detects a communication mode of a corresponding card reader and/or card, respectively, and communicates with the card reader and/or card, respectively, in the detected mode if the detected mode matches a communication mode in which the card and/or card reader, respectively, can communicate. Gray et al. also teach, as described, for example, in the Abstract and at column 1, line 58 to column 2, line 3 of the Gray et al. patent, a card and/or card reader that is operable in two communication modes, and that detects a communication mode of a corresponding card reader and/or card, respectively, and communicates with the card reader and/or card, respectively, if the detected mode matches one of the two communication modes in which the card and/or card reader, respectively, can communicate.

In contrast, as indicated above, Claim 43 recites "[a]n integrated circuit card interface device ... adapted to enable operation in accordance with multiple modes of operation, the multiple modes of operation comprising a standalone mode of

operation in which the interface device is not operably connected to a host device via the host interface" (emphasis added). In the Office Action it is contended that such standalone mode of operation is taught by Gray et al. as a passive mode described at column 8, lines 4-31 of the Gray et al. patent. However, as is clear, the passive mode taught by Gray et al. is not the same as the standalone mode recited in Claim 43. Gray et al. teach, at column 8, lines 23-26 of the Gray et al. patent, "[a] reader 50a then proceeds with normal operation, including entering a passive mode to enable [a] card 80 to communicate directly with [a] processor 12b in computer 12" (the computer 12 operates as a host device). (Gray et al. also teach elsewhere in the Gray et al. patent that passive mode enables direct communication between a card and a host computer: see col. 7, lines 4-8 and lines 18-21; col. 9, lines 5-8; col. 10, lines 59-60; col. 11, lines 36-37; col. 13, lines 18-21 and 52-54; col. 15, lines 28-31; and FIG. 7A of the Gray et al. patent.) Such "direct" communication between the card 80 and computer 12 can only occur if the reader 50a is operably connected to both the card 80 and the computer 12 (and operating in passive mode), since Gray et al. do not contemplate direct connection of a card to a computer, but only connection through a card reader. Thus, the passive mode taught by Gray et al. is clearly not a mode in which a card reader is not operably connected to a host device, as is the standalone mode recited in Claim 43: to the contrary, the passive mode taught by Gray et al. requires such a connection in order to enable direct communication between a card and a host device. Nor do Gray et

al. suggest such a standalone mode, since operation in such mode is not germane to the invention taught by Gray et al., which, as discussed above, concerns detection of a communication mode to enable communication between a card and card reader in the detected communication mode.

As can be appreciated from the above remarks, Gray et al. do not teach or suggest an integrated circuit card interface device as recited in Claim 43 and therefore Claim 43 is allowable over the teaching of Gray et al. Further, Claims 2-9, 41, 44-54 and 68, which each depend on Claim 43, either directly or indirectly, are allowable as dependent on an allowable claim.

Regarding Claim 57, the Office Action stated:

Gray teaches an integrated circuit card interface device (card interface circuit to detect a mode of a card, col. 1 line 46 - col. 2 line 3) comprising:  
an application memory (module 42, col. 4, lines 13-32)  
an application engine for managing one or more applications in said application memory (firmware which the processor 40 executes for operation of the card reader 20 and for monitoring data and/or commands from the computer 12, col. 4 lines 33-65)  
an input/output module (buffer for data inputs and outputs, col. 4 lines 33-65)  
a host interface (mode to enable the card 80 to communicate directly with a host computer, such as computer 12 (FIG. 1A), col. 6 line 52 - col. 7 lines 13); and  
one more integrated circuit card interfaces (circuits 105a and 105b, USB UART 224 or 226, processor 32 and firmware installed in memory 34, col. 8 line 49 - col. 9 line 8)  
wherein the interface device is adapted to enable operation in accordance with multiple modes of operation (reader interface circuit ... operable in two communication modes, col. 1 line 46 - col. 2 line 3), the multiple modes of operation comprising a programming mode of operation in which the interface device is operably connected to a integrated circuit card interfaces, and/or to a host device via the host interface, to enable

one or more programs to be added to, and/or deleted from, the interface device (ROM 42a includes firmware which the processor 40 executes for operation of the card reader 20 and for monitoring data and/or commands from the computer 12, col. 4 lines 13-32 et seq.).

Gray et al. do not teach or suggest "[a]n integrated circuit card interface device ... adapted to enable operation in accordance with multiple modes of operation, the multiple modes of operation comprising a programming mode of operation in which the interface device is operably connected to an integrated circuit card via one of the one or more integrated circuit card interfaces, and/or to a host device via the host interface, to enable one or more programs to be added to, and/or deleted from, the interface device," as recited in Claim 57. In the Office Action it is contended that such programming mode is taught by Gray et al. at column 4, lines 13-32 et seq. of the Gray et al. patent as ROM 42a including firmware which a processor 40 executes for operation of a card reader 20 and for monitoring data and/or commands from a computer 12. However, that does not appear to be the case. Gray et al. teach, at column 4, lines 33-56 of the Gray et al. patent:

ROM 42a includes firmware which the processor 40 executes for operation of the card reader 20 and for monitoring data and/or commands from the computer 12. In one embodiment, ROM 42a also includes firmware for monitoring data entered from the keyboard 16 or from a keypad (not shown) mounted on the reader 20. This firmware performs read/write operations to/from the card 30 and the read/write operations to/from RAM 42b, where RAM 42b is used as a temporary buffer for data inputs and outputs. In alternate embodiments, ROM 42a also includes firmware for: generating random numbers, for implementing encryption processes (such as encryption processes performed in accordance with the Data Encryption Standard (DES), Skipjack Standard and

Rivest Shamir Aldeman (RSA) Standard), for providing key exchange (such as those provided in accordance with the Key Exchange Algorithm (KEA), the Diffie-Hellman key agreement, and the RSA standard), for providing hashing operations (such as those provided in accordance with the Secure Hash Algorithm SHA-1, the American National Standard Institute (ANSI) 9.9 standard and Maximum Distance Separable (MDS) codes) and for providing digital signatures (such as those provided in accordance with the Digital Signature Algorithm (DSA) and the RSA standard).

Nowhere in the foregoing section of the Gray et al. patent do Gray et al. teach that the firmware operates to enable one or more programs to be added to, and/or deleted from, the card reader 20. Nor does that section of the Gray et al. patent suggest such operation of the firmware. Further, Gray et al. do not appear to teach or suggest such operation of the firmware, or other operation of the invention of Gray et al. in a programming mode as recited in Claim 57, elsewhere in the Gray et al. patent. If the Examiner continues to assert that Gray et al. teach a programming mode as recited in Claim 57, the Examiner is requested to more particularly identify such teaching in the Gray et al. patent.

As can be appreciated from the above remarks, it has not been shown in the Office Action that Gray et al. teach or suggest an integrated circuit card interface device as recited in Claim 57 and therefore Claim 57 is allowable over the teaching of Gray et al. Further, Claims 58-67, which each depend on Claim 57, either directly or indirectly, are allowable as dependent on an allowable claim.

Regarding Claim 69, the Office Action stated:

Gray teaches a portable integrated circuit card interface device (reader that contains a card interface circuit to detect a mode of a card, col. 1 line 46 - col. 2 line 3) comprising:

means for operably connecting the interface device to an integrated circuit card to enable communication between the interface device and the integrated circuit card (processor coupled to the reader interface circuit and the memory, communicates with the reader, col. 1 line 46 - col. 2 line 3)

means for operably connecting the interface device to a host device to enable communication between the interface device and the host device (reader 50 then proceeds with normal operation, including entering a passive mode to enable the card 80 to communicate directly with a host computer, such as computer 12, col. 6 line 52 - col. 7 lines 13)

means for operating the interface device in a standalone mode in which the interface device is not operably connected to a host device to enable communication between the interface device and the host device (passive mode to enable the card 80 to communicate directly with the processor 12b, col. 8 line 4-31) and

means for operating the interface device in a connected mode in which the interface device is operably connected to a host device to enable communication between the interface device and the host device (processor 40 executes for operation of the card reader 20 and for monitoring data and/or commands from the computer 12, col. 4 lines 13-32).

As discussed above with respect to Claim 43, Gray et al. do not teach or suggest an integrated circuit card interface device, as recited in Claim 69, including "means for operating the interface device in a standalone mode in which the interface device is not operably connected to a host device to enable communication between the interface device and the host device," and therefore Claim 69 is allowable over the teaching of Gray et al. Further, Claims 70-77, which each depend on Claim 69, either

directly or indirectly, are allowable as dependent on an allowable claim.

In view of the foregoing, it is requested that the rejection of Claims 2-9, 41, 43-54 and 57-77 under 35 U.S.C. § 102 be withdrawn.

CONCLUSION

Claims 2-9, 41, 43-54 and 57-77 were pending and were rejected. In view of the foregoing, it is requested that Claims 2-9, 41, 43-54 and 57-77 be allowed. If the Examiner wants to discuss any aspect of this application, the Examiner is invited to telephone Applicants' undersigned attorney at (408) 945-9912.

I hereby certify that this correspondence is being transmitted via facsimile to the U.S. Patent and Trademark Office, facsimile number (571) 273-8300, on May 30, 2007.

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Date

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Respectfully submitted,

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